Process for Identifying Animal Species of Conservation Concern for the Helena – Lewis and Clark National Forest's Revised Forest Plan and Final EIS (Post-Objection)

The 2012 Planning Rule (36 CFR 219) defines a species of conservation concern (SCC) as "a species, other than a federally recognized threatened, endangered, proposed or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species' capability to persist over the long-term in the plan area" (36 CFR 219.9). The Regional Forester typically identifies SCC as part of the planning process. Direction for identifying SCC are in the Forest Service handbook (FSH) for land management planning (i.e., the planning directives) at FSH 1909.12, chapter 10, section 12.52 and at chapter 20, section 21.22a.

This document outlines the Northern Region's approach in identifying animal SCC for the Helena – Lewis and Clark National Forest's (HLC) revised forest plan and final EIS. This includes terrestrial and aquatic vertebrates and invertebrates (botanical species are documented separately). This approach is consistent with the 2012 Planning Rule and agency guidance contained in the planning directives. The best available scientific information, including external expert knowledge and information received from the general public, was considered during this process.

Step 1. During the assessment phase, the HLC planning team biologist identified which of the terrestrial vertebrate animal species¹ documented to occur within the planning area met the categories described in items 1A-I below. This step resulted in the list of species to consider for potential SCC status.

The HLC planning team reviewed spatial observation records maintained by the Montana Natural Heritage Program (NHP)² of all species documented to occur on National Forest System (NFS) lands within the plan area. The biologists then queried those records for species that met at least one category in Step 1 A-I below.

The Montana NHP observation database was used because it is the most comprehensive, reliable, and up to date source of documented species occurrences on NFS lands in Montana. The Montana NHP, which is part of the international NatureServe network, manages statewide occurrence records and other information for species and habitats of conservation interest. The Forest Service, other agencies, and the public all contribute observation records to Montana NHP's statewide data repository. Other databases examined for additional observation records include the Forest Service's corporate Wildlife database and the database hosted on the Rocky Mountain Avian Data Center portal³; however, most of those records were also contained in the Montana NHP database.

The categories of species to consider originated from the final planning directives at FSH 1909.12, chapter 10, section 12.52. A species meeting any one category was further considered for potential SCC (PSCC) status regardless of whether it met another category. The categories were:

A. NatureServe global (G) or infraspecific taxon (T) ranks of 1 or 24

¹ No aquatic species or invertebrates were considered for PSCC status. This was an oversight that was corrected during SCC evaluations in Step 3.

² This may have included the use of standalone GIS files obtained from the NHPs, or the use of the Montana NHP's Species Snapshot tool, available at http://mtnhp.org/SpeciesSnapshot/

³ See http://rmbo.org/v3/avian/ExploretheData.aspx

⁴ Statuses obtained from Montana NHP. See http://mtnhp.org/SpeciesOfConcern/?AorP=a for definitions and more information.

- B. Delisted (removed) from the Endangered Species Act list within the last five years, or delisted and still monitored by the regulatory agency⁵
- C. State of Montana threatened or endangered designations³
- D. Positive "90-day findings" made by the US Fish and Wildlife Service in response to federal listing petitions⁴
- E. Montana NHP state (S) ranks of 1 or 2.1 These ranks, while assigned by Montana NHP, are also reflected in the Montana Species of Concern list by Montana Fish Wildlife and Parks and Montana NHP. Higher numerical ranks (e.g., S3, S4, S5) were not included in category E because they indicate relatively secure conservation status at the statewide level; concern at the plan level would be identified in Step 1 category I. This approach is consistent with FSH 1909.12 chapter 10, section 12.52d(3)(a).
- F. NatureServe G3 ranks (invertebrates not included). G3 invertebrate species were not evaluated because commonly, there is insufficient scientific information available to indicate substantial concern, such as data on distribution, abundance, habitat use, trends, relevant threats and life history characteristics, and reliable identification in the field. Species with higher ranks (e.g., G4, G5) were not automatically considered because they are reasonably secure at the global level, and if there was concern at the plan level, they would be identified in Step 1 category I. This approach is consistent with FSH 1909.12 chapter 10, section 12.52d(3)(a).
- G. Regional Forester's sensitive species for the HLC and adjoining National Forests (i.e., Flathead, Lolo, and Custer Gallatin)⁶
- H. SCC or PSCC on adjoining National Forests (i.e., the Flathead and Custer Gallatin)⁷
- I. Local conservation concern due to potentially significant threats to populations or habitats, declining trends in populations or habitat, restricted ranges or habitats, or low population numbers. This category of species may be identified through public comments and from conversations with local biologists from the Forest Service, other federal agencies, Montana Fish Wildlife & Parks, Montana NHP, Tribes, and local groups or individuals with scientific expertise.

Step 2: During the assessment phase, the HLC planning team, in consultation with others, identified which of the animal species that emerged from Step 1 potentially met the criteria in items 2A, B, and C below. This step resulted in the "potential SCC" animal list disclosed in the HLC's Final Assessment Report.

This rapid evaluation sought the best available scientific information, including expertise from internal and external individuals, to determine which species identified in Step 1 met the criteria in Step 2 A, B, and C below. The criteria originated from the planning directives at FSH 1909.12, chapter 10, section 12.52c. External expertise originated primarily from Montana Fish Wildlife & Parks, Montana NHP, research entities, and local groups or individuals with scientific expertise.

The criteria for identifying potential SCC were:

- A. The species must be native to, and known to occur in the plan area.
 - i. Species must be established or becoming established in the plan area. Species having

⁵ Statuses obtained from US Fish and Wildlife Service.

⁶ See http://www.fs.usda.gov/detail/r1/plants-animals/?cid=stelprdb5130525. The final planning directives do not require consideration of this category; however, it was applied to compensate for the absence of SCC on some adjoining units, which have not yet been designated.

⁷ See http://www.fs.usda.gov/detail/r1/landmanagement/planning/?cid=fseprd500402

- only accidental records were removed from further consideration. Generally, species were judged to be accidental only if they were highly mobile, had fewer than 3 recorded observations in the plan area, had no direct evidence of breeding, and the observations occurred outside of suitable habitat or beyond the species' normal range.
- ii. Species were removed from the dataset if they were designated by Montana NHP as SX, SH, SNR, SU, or SNA³.
- iii. MNHP observation records were automatically excluded if the point location was too imprecise to determine whether the observation actually occurred in the plan area, such as those recorded with latilong or quarter latilong precision (which represent approximately 3,200 and 800 sq mi, respectively). These types of records most commonly originate from historical documentation that provided only broad reference to locations. However, it is important to note that exclusion of these records would only result in dropping a species from further consideration if more precise records for the species did not also occur within the planning area.
- B. The best available scientific information must indicate substantial concern about the species' capability to persist over the long term in the plan area.
 - i. In general, substantial concern was best demonstrated by a decreasing population (abundance or distribution), decreasing habitat, or significant threats, particularly when they were greater than expected under natural variation. Other factors considered during this evaluation included abundance, geographic distribution, reproductive potential, dispersal capabilities, and other demographic and life history characteristics of the species that could influence long-term persistence in the plan area. This approach was based on best available scientific information in conjunction with professional expertise of Regional Office biologists.
 - ii. Rarity alone typically was not considered a substantial concern unless accompanied by one of the three general conditions listed in Step 2 (B)(i) above or having other prominent circumstances leading to concern for long-term persistence.
- C. If there was insufficient scientific information available to conclude that there was a substantial concern about a species' capability to persist in the plan area over the long-term, or if the species was secure in the plan area, that species was not identified as an SCC. Rationale for not identifying species as SCC included:
 - i. If the species was secure and its continued long-term persistence in the plan area was not at risk based on knowledge of its abundance, distribution, lack of threats to persistence, trends in habitat, or responses to management.
 - ii. Insufficient scientific information available to conclude that there was a substantial concern about the species' capability to persist in the plan area over the long term. Lack of sufficient scientific information included having limited inventory data resulting from low survey effort, lack of effective detection methods, or, in the case of purported population declines, lack of reasonably consistent monitoring methods among trend monitoring periods.

Step 3. During the planning phase, Regional Office and HLC planning biologists identified the animal SCC list by applying the final planning directives to the species identified in Steps 1 and 2 above, and adjusting where necessary. Aquatic species and all invertebrates having the appropriate statuses were also evaluated at this time. This step resulted in the animal SCC list for the HLC proposed action.

Aquatic species meeting the categories identified in Step 1 A-I were identified through use of the Montana NHP Species Snapshot tool⁸. This tool queries the same spatial observations from Montana NHP that are described in Step 1 utilizing a simplified online data query system; the immediate output is tabular (non-spatial), but spatial displays can also be readily accessed. This tool is also available for public use, and provides maximum transparency to the main data source used by the Forest Service to help determine what is known to occur in the HLC plan area.

Observations of terrestrial species were obtained in the same manner as described in Step 1; that is, through a spatial data request. However, the Montana NHP Species Snapshot tool utilizes the same dataset, and is available for public use.

This step was completed by using the best available scientific information (including expertise from internal and external individuals) and the final planning directives at FSH 1909.12, chapter 10, section 12.52 and chapter 20, section 21.22a. External expertise originated from many of the same organizations listed in Step 2.

Step 4. In response to public comments, objections and new information, Regional Office staff iteratively reviewed the species selection process and criteria requirements, best available scientific information, and the rationale for identifying SCC. During these phases, Regional Office staff clarified and augmented documentation for the SCC planning record. This resulted in the animal SCC list for the HLC's Revised Forest Plan and Final FIS.

Process clarifications and changes to the animal selection process resulting from this step:

A. We applied NatureServe timelines to species observation records in the plan area to differentiate which animal species have sufficient information to determine they are *currently* known to occur in the plan area from those only known to historically occur in the plan area. We accepted NatureServe timelines⁹ as best available scientific information to establish when past observations are not enough evidence to conclude that the species is known to occur in the plan area at this time. In the absence of known disturbance and with the habitat still extant, a historic rank is generally recommended for occurrences that have not been reconfirmed for 20 or more years, but for many short-lived insects a shorter interval may be appropriate, and for unusually stable habitats (like undisturbed caves), or for certain plants whose seeds may persist and remain viable in the soil for decades, a longer interval, up to 40 years, may be used. With very few exceptions, occurrences are to be regarded as historic after 40 years without confirmation, even with no effort to locate the species. Additional information can be found at https://www.natureserve.org/sites/default/files/eo rank specificationsgeneric guidelines and decision key may2020.pdf. Montana Natural Heritage Program describes their historic ranking information at http://fieldguide.mt.gov/statusCodes.aspx#msrc:rank.

⁸ Available at http://mtnhp.org/SpeciesSnapshot/

⁹ Per NatureServe, being ranked as historical means that recent field information verifying the continued existence is lacking.

- B. We clarify that, for the purposes of the planning process, the individuals of a species of conservation concern that exist in the plan area will be considered to be members of one population of that species. Further, to be considered viable (persistent) in the long term, a population must have sufficient distribution to be resilient and adaptable to stressors and likely future environments (preamble to the 2012 Planning Rule, 77 FR at 21217, April 9, 2012). A population need not be present or secure throughout the entire plan area in order to be viable.
- C. We clarify that lack of sufficient scientific information (i.e., insufficient information) as originally described in Step 2(C)(ii) above can include having:
 - a. Limited inventory data resulting from low survey effort, lack of targeted surveys, or lack of effective detection methods.
 - b. Lack of reasonably consistent monitoring methods needed to accurately determine population trend.
 - c. Lack of published information or status reports regarding the species in the plan area.
 - d. No known threats or risks to populations in the plan area, or threats are speculative in nature.
 - e. Too little known about the species, its habitat preferences, or relative life history characteristics.

Even when some types of information are limited, the weight of evidence may still indicate substantial concern, or no substantial concern, when we consider what we do know about habitat, threats, abundance, geographic distribution, reproductive potential, dispersal capabilities, and other relevant factors.

Most changes between the potential SCC list generated in Step 2 and the iterative SCC list generated in Step 4 for the revised forest plan and final EIS resulted from more thorough review of the best available scientific information, continued national learning and public engagement as the Forest Service implemented the 2012 planning rule. This allowed more thorough understanding of the final directives and more thorough evaluations of the best available scientific information regarding the species' statuses and threats to persistence within the plan area.

Additionally, we followed clarification in a June 6, 2016 Memorandum by the Deputy Chief of the National Forest System to regional foresters, which states that if a species is determined to be at risk across its range, but is determined to be secure within the plan area, it cannot be an SCC.

Summary Results

As a result of processes described in this document, the following animal SCC have been identified for the Helena-Lewis and Clark National Forest's revised Forest Plan and final EIS. One species (westslope cutthroat trout) was added to what the regional forester identified in her letter dated April 4, 2018. See the species evaluation documentation for a full description of the information considered to make this determination.

Common Name	Scientific Name
Lewis's woodpecker	Melanerpes lewis
Flammulated owl	Psiloscops flammeolus
Western pearlshell	Margaritifera falcata
Westslope cutthroat trout	Oncorhynchus clarki lewisi